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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/100,952	06/22/1998	KWANG-YOUN PARK	P55248	9119

7590 07/08/2004  
ROBERT E BUSHNELL  
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WASHINGTON, DC 20005

EXAMINER

CHIEU, PO LIN

ART UNIT	PAPER NUMBER
2615	25

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/100,952

Applicant(s)

PARK ET AL.

Examiner

Polin Chieu

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 3/18/04 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al (5,479,266) in view of Yuen et al (6,154,203).

Young et al discloses pre-storing program identification information (232) contained in broadcast programs of broadcast stations while viewing a given broadcast program corresponding to the program identification information (col. 12, line 60 - col. 13, line 11; i.e. listing information in the VBI may be continuously sent and stored in a

memory; note that the EPG does not have to be viewed while this occurs); selecting reserve-recording (col. 5, lines 40-55); reading program identification information corresponding to the selected program among the pre-stored data (col. 13, lines 25-35); and setting reserve-recording data with the program identification information (col. 13, lines 25-35). However, Young et al does not disclose that the viewing of the program is maintained.

Yuen et al teaches maintaining the viewing of a broadcast program while operating the electronic program guide (EPG) in figure 2. Young et al allows reserved recording to be set while operating the EPG (col. 5, lines 40-55). Therefore, it would have been obvious to maintain viewing of the given broadcast program when a program is selected for reserved-recording without interruption.

It would have been highly desirable to provide an EPG with a PIP window so that the program would not be interrupted during operation of the EPG.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to maintain the viewing of a program while selecting reserve-recording in the device of Young et al.

Regarding claim 2, Young et al does not specifically state that the program identification information contains broadcast titles, broadcast data, time, and channel data. However, in figure 1 a display is generated showing all the program identification information listed above. Clearly this must be contained in the program identification information since the display is generated from the program identification information. Young et al discloses that the reserve-recording data includes channel data, recording

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date and time (col. 13, lines 25-35). Although recording date is not specifically stated, the recording date is inherent since the recorder cannot properly record the program without it.

Regarding claim 3, Young et al discloses a VCR (252) and a television (210) in figure 22B.

The limitations recited in claim 4 were discussed in the art rejection of claim 3. Please refer to the art rejection of claim 3.

Regarding claim 5, Young et al discloses a first storage unit (232), a key input unit (212), and a second storage unit (236) in figure 22A. Young et al also discloses pre-storing program identification information contained in broadcast signals of at least one broadcast station while viewing a given broadcast program corresponding to the program identification information; reading the program identification information corresponding to the broadcast program; and setting reserve-recording information as discussed in claim 1. However, Young et al does not disclose maintaining a current broadcast.

Yuen et al teaches maintaining the viewing of a broadcast program while operating the electronic program guide (EPG) in figure 2. Young et al allows reserved recording to be set while operating the EPG (col. 5, lines 40-55). Therefore, it would have been obvious to maintain viewing of the given broadcast program when a program is selected for reserved-recording without interruption.

It would have been highly desirable to provide an EPG with a PIP window so that the program would not be interrupted during operation of the EPG.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to maintain the viewing of a program while a key input signal reserve-records the broadcast program in the device Young et al.

Regarding claim 6, Young et al discloses reading program identification information from the program identification information stored in the first storage unit (col. 13, lines 25-35).

Regarding claim 7, Young et al discloses a VCR (252) and a television (210) in figure 22B.

Regarding claim 8, please refer to the art rejection of claim 7.

Regarding claim 9, Young et al discloses receiving a broadcast signal from an antenna (200) and extracting program identification information (222); storing the program identification information (232); determining if a reserve key signal is input by a user for reserve-recording (214); and reading the program identification information corresponding to the broadcast program from the first memory (232), setting reserve-recording information and storing it in a second memory (236) in figure 22A. However, Young et al does not disclose maintaining the viewing without interruption.

Yuen et al teaches maintaining the viewing of a broadcast program while operating the electronic program guide (EPG) in figure 2. Young et al allows reserved recording to be set while operating the EPG (col. 5, lines 40-55). Therefore, it would have been obvious to maintain viewing of the given broadcast program when a program is selected for reserved-recording without interruption.

It would have been highly desirable to provide an EPG with a PIP window so that the program would not be interrupted during operation of the EPG.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to maintain the viewing without interruption, and recognize the viewing broadcast program as a broadcast program to be reserve-recorded in Young et al.

The limitations of claim 10 were discussed in the art rejection of claim 2. Please refer to the art rejection of claim 2.

Regarding claim 11, Young et al discloses a VCR (252) and a television (210) in figure 22B.

Regarding claim 12, please refer to the art rejection of claim 11.

4. Claims 14, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al in view of Yuen et al and Choi (5,285,265).

Regarding claims 14, 16, and 18, the combined teachings of Young et al and Yuen et al disclose maintaining viewing of a given broadcast program while receiving a the reserve key (discussed previously), while recognizing the given broadcast program being viewed as a broadcast program to be reserve-recorded, while reading the program identification information corresponding to the given broadcast program information from the first memory, while setting the reserve-recording information in accordance with the read program identification information, and while storing the reserve-recording information in the second memory for reserved recording (col. 13, lines 25-35). However, Young et al does not disclose that the viewing of the given

broadcast program is maintained without a reduction in size of the video display of the given broadcast program while receiving the reserve key signal input by the user, while recognizing the given broadcast program being viewed as a broadcast program to be reserve-recorded, while reading the program identification information corresponding to the given broadcast program information from the first memory, while setting the reserve-recording information in accordance with the read program identification information, and while storing the reserve-recording information in the second memory for reserved recording.

Choi teaches performing the reserved recording operation in a PIP window without reducing the size of the video display of the broadcast program (figs. 2 and 3).

It would have been highly desirable to use a PIP window to operate the EPG so that the video signal can still be easily viewed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to perform the reserved recording operation in a PIP window without reducing the size of the video display in the device of Young et al.

### ***Claim Rejections - 35 USC § 103***

5. The examiner notes that filing of translation of the priority document can eliminate the following rejection(s). The prior rejections are provided in anticipation that the following rejection(s) will be eliminated.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:



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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al in view of Gruse et al (6,173,112).

Young et al discloses pre-storing program identification information (232) contained in broadcast programs of broadcast stations while viewing a given broadcast program corresponding to the program identification information (col. 12, line 60 - col. 13, line 11; i.e. listing information in the VBI may be continuously sent and stored in a memory; note that the EPG does not have to be viewed while this occurs); selecting reserve-recording (col. 5, lines 40-55); reading program identification information corresponding to the selected program among the pre-stored data (col. 13, lines 25-35); and setting reserve-recording data with the program identification information (col. 13, lines 25-35). However, Young et al does not disclose that the viewing of the program is maintained without interruption while setting reserved-recording.

Gruse et al teaches maintaining viewing of the given program without interruption while reading program identification information corresponding to the program identification information (col. 2, line 53 – col. 3, line 4).

It would have been highly desirable to maintain viewing of the given broadcast program without interruption while setting reserve-recording so that the recording system provides a user with the capability to select a program for recording, wherein the

selection can be made while the program content is being broadcast (col. 1, lines 45-52).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to maintain the viewing of the given program in the device of Young et al.

Regarding claim 2, Young et al does not specifically state that the program identification information contains broadcast titles, broadcast data, time, and channel data. However, in figure 1 a display is generated showing all the program identification information listed above. Clearly this must be contained in the program identification information since the display is generated from the program identification information. Young et al discloses that the reserve-recording data includes channel data, recording date and time (col. 13, lines 25-35). Although recording date is not specifically stated, the recording date is inherent since the recorder cannot properly record the program without it.

Regarding claim 3, Young et al discloses a VCR (252) and a television (210) in figure 22B.

The limitations recited in claim 4 were discussed in the art rejection of claim 3. Please refer to the art rejection of claim 3.

Regarding claims 13 and 14, as discussed in the art rejection of claim 1, Gruse et al teaches setting reserve-recording without interrupting the broadcast program. Setting reserve-recording without interrupting the broadcast programming results in maintaining the viewing of the given broadcast program selected without degradation of the video

display or without a reduction in size of the video display of the program during view during the viewing of the given broadcast program.

Regarding claim 5, Young et al discloses a first storage unit (232), a key input unit (212), a controller (228), and a second storage unit (236; Fig. 22A). The steps performed by the apparatus were discussed in the art rejection of claim 1. Please refer to the art rejection of claim 1.

The limitations of claims 6-8 were discussed in the art rejection of claims 2-4. Please refer to the art rejections of claims 2-4.

The limitations of claims 15-16 were discussed in the art rejection of claims 13-14. Please refer to the art rejections of claims 13-14.

The limitations of claims 9-12 and 17-18 were discussed in the art rejection of claims 1-4 and 13-14. Please refer to the art rejections of claims 1-4 and 13-14.

The limitations of claims 19-22 were discussed in the art rejection of claims 1-4 and 13. Please refer to the art rejections of claims 1-4 and 13.

The limitations of claims 23-26 were discussed in the art rejection of claims 5-8 and 15. Please refer to the art rejections of claims 5-8 and 15.

The limitations of claims 27-30 were discussed in the art rejection of claims 9-12 and 17. Please refer to the art rejections of claims 9-12 and 17.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kinebuchi, Hwang, Choi, Kim, and Huh disclose recording devices using program identification information for recording.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Polin Chieu whose telephone number is (703) 308-6070. The examiner can normally be reached on M-Th 8:00 AM-6:30 PM.

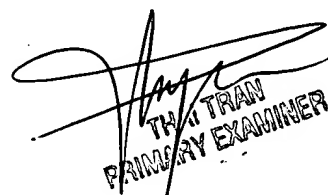
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B. Christensen can be reached on (703) 308-9644. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

  
THUAN TRAN  
PRIMARY EXAMINER